

Fig. 1

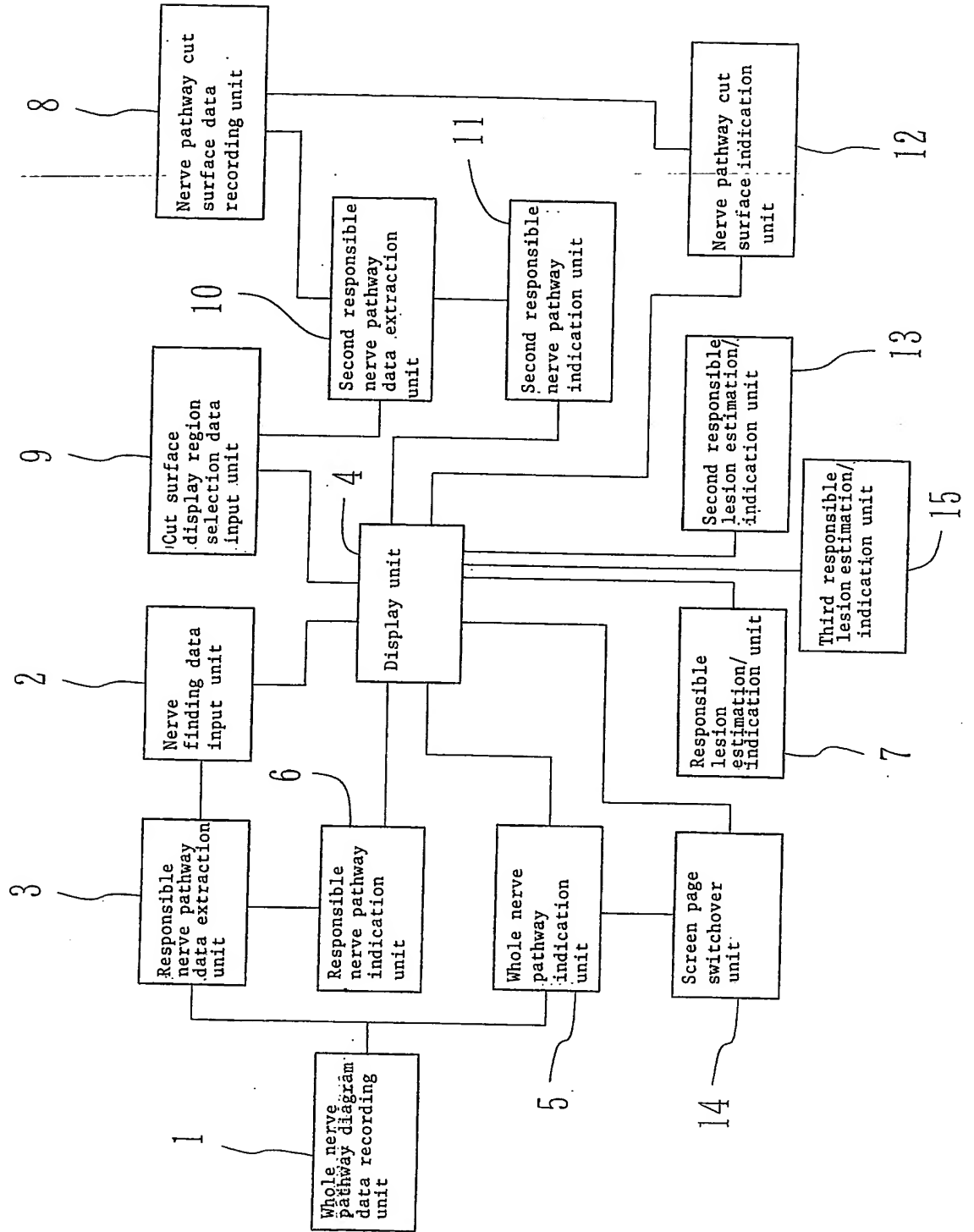


Fig. 2

| 20 | 21   |  | 22    | 23   |
|----|--|--|-------|------|
|    | Neural Finding Item  |  | Right | Left |
|    | Oculomotor Restriction                                       |  | No    | No   |
|    | Inferior Oculomotor Restriction                              |  | No    | No   |
|    | Jaw Reflex Acceleration                                      |  | No    | No   |
|    | Impaired Facial Tactual Senstaion                            |  | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                   |  | No    | No   |
|    | Corneal Areflexia  |  | No    | No   |
|    | Exterior Oculomotor Restriction No                           |  | No    | No   |
|    | Upper Facial Paralysis                                       |  | No    | No   |
|    | Lower Facial Paralysis                                       |  | No    | No   |
|    | Impaired Taste   |  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty              |  | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                          |  | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound<br>Dysphemia |  | No    | No   |
|    | Sternocleidomastoid Paralysis                                |  | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation               |  | No    | No   |
|    | Impaired Upper Limb Deep Sensation                           |  | No    | No   |
|    | Upper Limb Motor Paralysis                                   |  | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                     |  | No    | No   |
|    | Impaired Trunk Pain/Temperature Sensation                    |  | No    | No   |
|    | Impaired Trunk Deep Sensation                                |  | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                       |  | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation               |  | No    | No   |
|    | Impaired Lower Limb Deep Sensation                           |  | No    | No   |
|    | Lower Limb Motor paralysis                                   |  | No    | No   |
|    | Lower Limb Tendon Reflex Acceleration No                     |  | No    | No   |
|    | Babinsky's Reflex  |  | No    | No   |

Fig. 3

| 20 | 21  |  | 22    | 23   |
|----|---|--|-------|------|
|    | Neural Finding Item                                       |  | Right | Left |
|    | Oculomotor Restriction                                    |  | No    | No   |
|    | Inferior Oculomotor Restriction                           |  | No    | No   |
|    | Jaw Reflex Acceleration                                   |  | No    | No   |
|    | Impaired Facial Tactual Sensation                         |  | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                |  | No    | No   |
|    | Corneal Areflexia   |  | No    | No   |
|    | Exterior Oculomotor Restriction No                        |  | No    | No   |
|    | Upper Facial Paralysis                                    |  | No    | No   |
|    | Lower Facial Paralysis                                    |  | No    | No   |
|    | Impaired Taste  |  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty           |  | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                       |  | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound Dysphemia |  | No    | No   |
|    | Sternocleidomastoid Paralysis                             |  | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Upper Limb Deep Sensation                        |  | No    | No   |
|    | Upper Limb Motor Paralysis                                |  | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Impaired Trunk Pain/Temperature Sensation                 |  | No    | No   |
|    | Impaired Trunk Deep Sensation                             |  | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                    |  | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Lower Limb Deep Sensation                        |  | No    | No   |
|    | Lower Limb Motor paralysis                                |  | Yes   | No   |
|    | Lower Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Babinsky's Reflex   |  | No    | No   |

Fig. 4

| 20 | 21  |  | 22    | 23   |
|----|---|--|-------|------|
|    | Neural Finding Item                                       |  | Right | Left |
|    | Oculomotor Restriction                                    |  | No    | No   |
|    | Inferior Oculomotor Restriction                           |  | No    | No   |
|    | Jaw Reflex Acceleration                                   |  | No    | No   |
|    | Impaired Facial Tactual Sensation                         |  | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                |  | No    | No   |
|    | Corneal Areflexia   |  | No    | No   |
|    | Exterior Oculomotor Restriction No                        |  | No    | No   |
|    | Upper Facial Paralysis                                    |  | No    | Yes  |
|    | Lower Facial Paralysis                                    |  | No    | No   |
|    | Impaired Taste  |  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty           |  | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                       |  | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound Dysphemia |  | No    | No   |
|    | Sternocleidomastoid Paralysis                             |  | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Upper Limb Deep Sensation                        |  | No    | No   |
|    | Upper Limb Motor Paralysis                                |  | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Impaired Trunk Pain/Temperature Sensation                 |  | No    | No   |
|    | Impaired Trunk Deep Sensation                             |  | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                    |  | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Lower Limb Deep Sensation                        |  | No    | No   |
|    | Lower Limb Motor paralysis                                |  | Yes   | No   |
|    | Lower Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Babinsky's Reflex   |  | No    | No   |

Fig. 5

| 20 | 21  |  | 22    | 23   |
|----|---|--|-------|------|
|    | Neural Finding Item                                       |  | Right | Left |
|    | Oculomotor Restriction                                    |  | No    | No   |
|    | Inferior Oculomotor Restriction                           |  | No    | No   |
|    | Jaw Reflex Acceleration                                   |  | No    | No   |
|    | Impaired Facial Tactual Sensation                         |  | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                |  | No    | No   |
|    | Corneal Areflexia   |  | No    | No   |
|    | Exterior Oculomotor Restriction No                        |  | No    | Yes  |
|    | Upper Facial Paralysis                                    |  | No    | Yes  |
|    | Lower Facial Paralysis                                    |  | No    | No   |
|    | Impaired Taste  |  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty           |  | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                       |  | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound Dysphemia |  | No    | No   |
|    | Sternocleidomastoid Paralysis                             |  | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Upper Limb Deep Sensation                        |  | No    | No   |
|    | Upper Limb Motor Paralysis                                |  | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Impaired Trunk Pain/Temperature Sensation                 |  | No    | No   |
|    | Impaired Trunk Deep Sensation                             |  | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                    |  | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Lower Limb Deep Sensation                        |  | No    | No   |
|    | Lower Limb Motor paralysis                                |  | Yes   | No   |
|    | Lower Limb Tendon Reflex Acceleration No                  |  | No    | No   |
|    | Babinsky's Reflex   |  | No    | No   |

Fig. 6

| 21  | 22    | 23   |
|---|-------|------|
| Neural Finding Item                             | Right | Left |
| Oculomotor Restriction                          | No    | No   |
| Inferior Oculomotor Restriction                 | No    | No   |
| Jaw Reflex Acceleration                         | No    | No   |
| Impaired Facial Tactual Senstaion               | No    | No   |
| Impaired Facial Pain/Temperature Sensation      | No    | No   |
| Corneal Areflexia                               | No    | No   |
| Exterior Oculomotor Restriction No              | No    | Yes  |
| Upper Facial Paralysis                          | No    | Yes  |
| Lower Facial Paralysis                          | No    | No   |
| Impaired Taste                                  | No    | No   |
| Lowered Pharyngeal Reflex/Swallowing Difficulty | No    | No   |
| Impaired Pharyngeal Sound Dysphemia             | No    | No   |
| Lingual Muscle Paralysis/Impaired Lingual Sound | No    | No   |
| Dysphemia                                       |       |      |
| Sternocleidomastoid Paralysis                   | No    | No   |
| Impaired Upper Limb Pain/Temperature Sensation  | No    | No   |
| Impaired Upper Limb Deep Sensation              | No    | No   |
| Upper Limb Motor Paralysis                      | Yes   | No   |
| Upper Limb Tendon Reflex Acceleration No        | Yes   | No   |
| Impaired Trunk Pain/Temperature Sensation       | No    | No   |
| Impaired Trunk Deep Sensation                   | No    | No   |
| Level Of Impaired Trunk Deep Sensation          | No    | No   |
| Impaired Lower Limb Pain/Temperature Sensation  | No    | No   |
| Impaired Lower Limb Deep Sensation              | No    | No   |
| Lower Limb Motor paralysis                      | Yes   | No   |
| Lower Limb Tendon Reflex Acceleration No        | No    | No   |
| Babinsky's Reflex                               | No    | No   |

Fig. 7

| 20 | 21  | 22    | 23   |
|----|---|-------|------|
|    | Neural Finding Item                                       | Right | Left |
|    | Oculomotor Restriction                                    | No    | No   |
|    | Inferior Oculomotor Restriction                           | No    | No   |
|    | Jaw Reflex Acceleration                                   | No    | No   |
|    | Impaired Facial Tactual Senstaion                         | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                | No    | No   |
|    | Corneal Areflexia   | No    | No   |
|    | Exterior Oculomotor Restriction No                        | No    | Yes  |
|    | Upper Facial Paralysis                                    | No    | Yes  |
|    | Lower Facial Paralysis                                    | No    | No   |
|    | Impaired Taste  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty           | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                       | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound Dysphemia | No    | No   |
|    | Sternocleidomastoid Paralysis                             | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation            | No    | No   |
|    | Impaired Upper Limb Deep Sensation                        | No    | No   |
|    | Upper Limb Motor Paralysis                                | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                  | Yes   | No   |
|    | Impaired Trunk Pain/Temperature Sensation                 | No    | No   |
|    | Impaired Trunk Deep Sensation                             | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                    | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation            | No    | No   |
|    | Impaired Lower Limb Deep Sensation                        | No    | No   |
|    | Lower Limb Motor paralysis                                | Yes   | No   |
|    | Lower Limb Tendon Reflex Acceleration No                  | Yes   | No   |
|    | Babinsky's Reflex   | No    | No   |

Fig. 8

| 20 | 21  |  | 22    | 23   |
|----|---|--|-------|------|
|    | Neural Finding Item                                       |  | Right | Left |
|    | Oculomotor Restriction                                    |  | No    | No   |
|    | Inferior Oculomotor Restriction                           |  | No    | No   |
|    | Jaw Reflex Acceleration                                   |  | No    | No   |
|    | Impaired Facial Tactual Sensation                         |  | No    | No   |
|    | Impaired Facial Pain/Temperature Sensation                |  | No    | No   |
|    | Corneal Areflexia   |  | No    | No   |
|    | Exterior Oculomotor Restriction No                        |  | No    | Yes  |
|    | Upper Facial Paralysis                                    |  | No    | Yes  |
|    | Lower Facial Paralysis                                    |  | No    | No   |
|    | Impaired Taste  |  | No    | No   |
|    | Lowered Pharyngeal Reflex/Swallowing Difficulty           |  | No    | No   |
|    | Impaired Pharyngeal Sound Dysphemia                       |  | No    | No   |
|    | Lingual Muscle Paralysis/Impaired Lingual Sound Dysphemia |  | No    | No   |
|    | Sternocleidomastoid Paralysis                             |  | No    | No   |
|    | Impaired Upper Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Upper Limb Deep Sensation                        |  | No    | No   |
|    | Upper Limb Motor Paralysis                                |  | Yes   | No   |
|    | Upper Limb Tendon Reflex Acceleration No                  |  | Yes   | No   |
|    | Impaired Trunk Pain/Temperature Sensation                 |  | No    | No   |
|    | Impaired Trunk Deep Sensation                             |  | No    | No   |
|    | Level Of Impaired Trunk Deep Sensation                    |  | No    | No   |
|    | Impaired Lower Limb Pain/Temperature Sensation            |  | No    | No   |
|    | Impaired Lower Limb Deep Sensation                        |  | No    | No   |
|    | Lower Limb Motor paralysis                                |  | Yes   | No   |
|    | Lower Limb Tendon Reflex Acceleration No                  |  | Yes   | No   |
|    | Babinsky's Reflex   |  | Yes   | No   |



Fig. 9

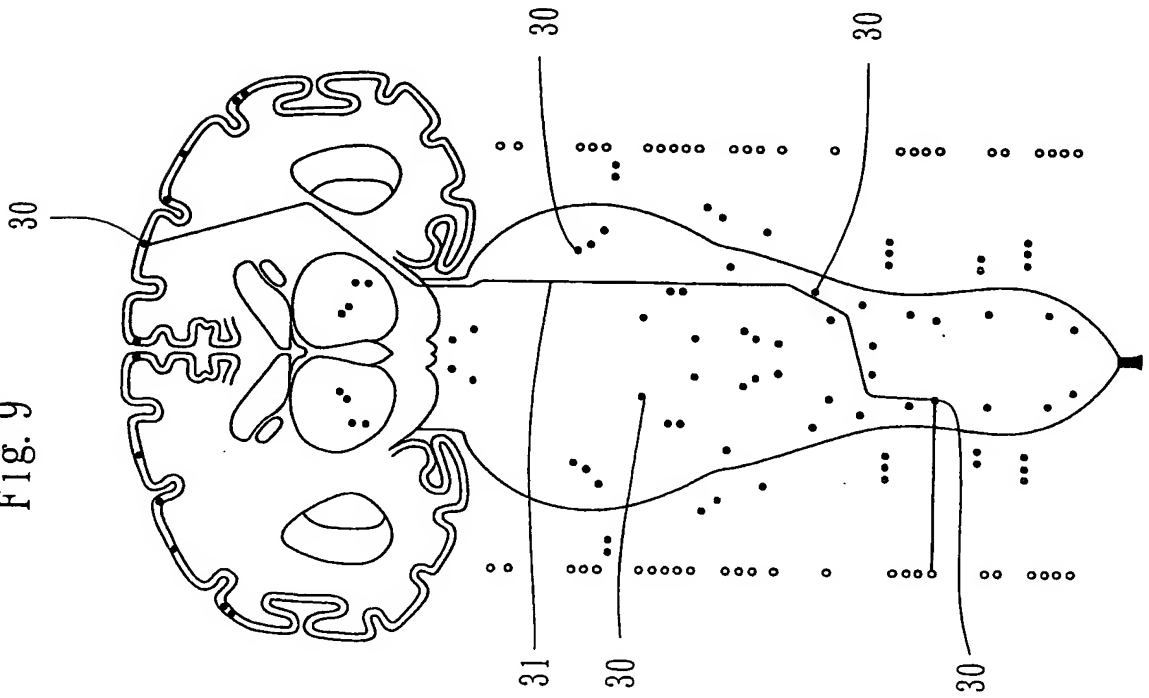


Fig. 10

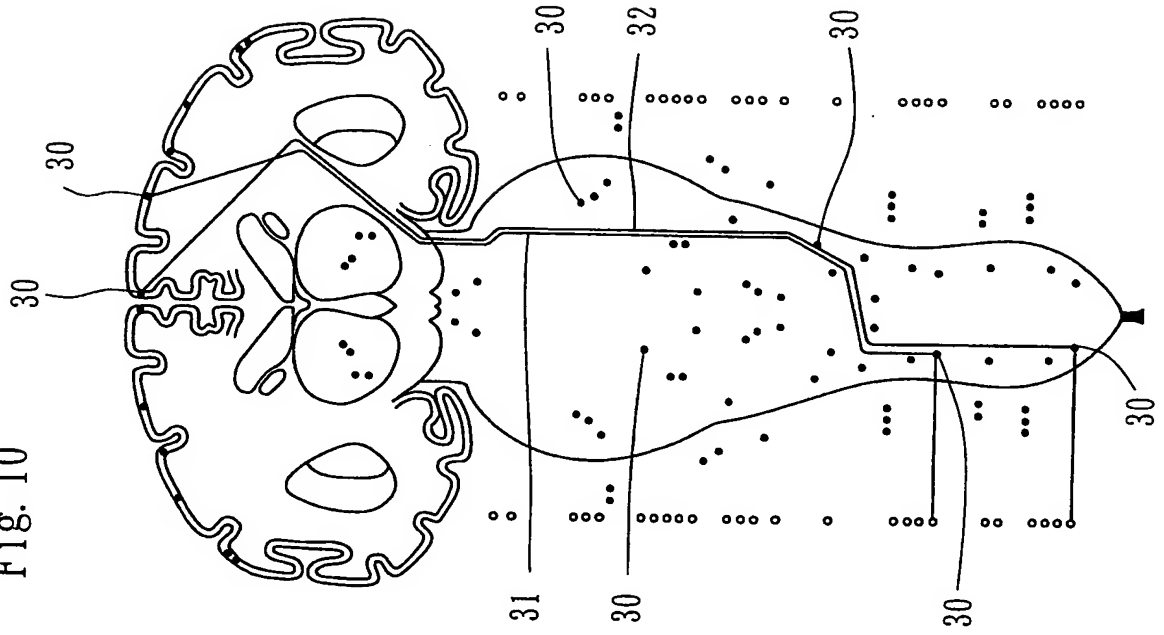


Fig. 11

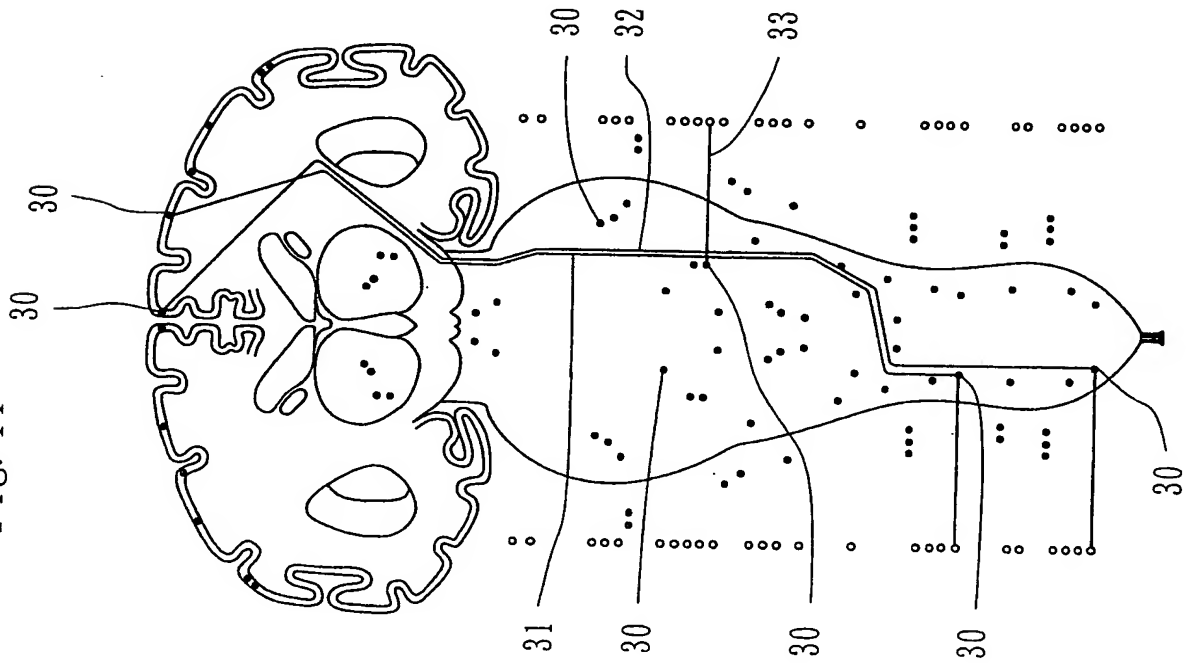


Fig. 12

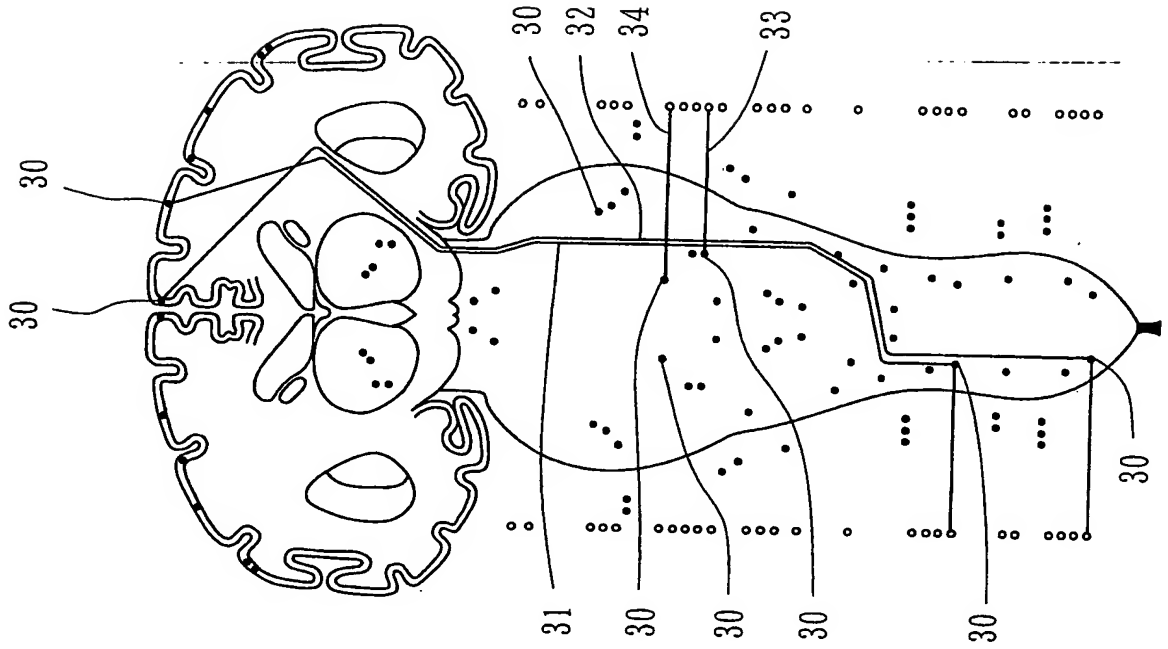


Fig. 13

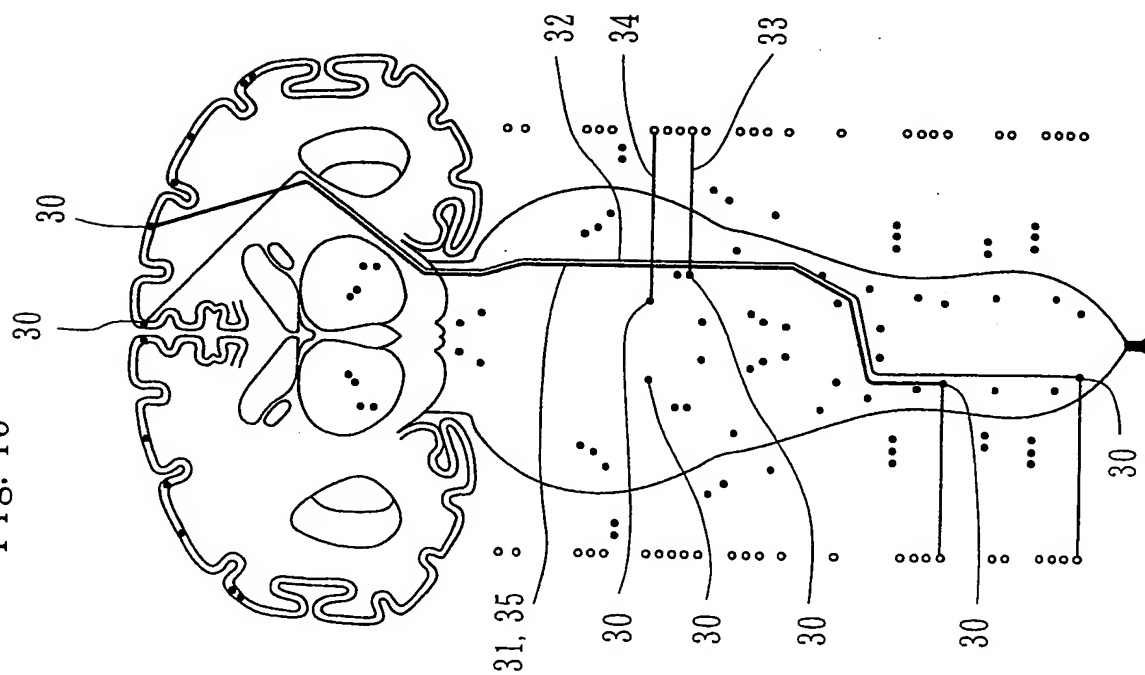


Fig. 14

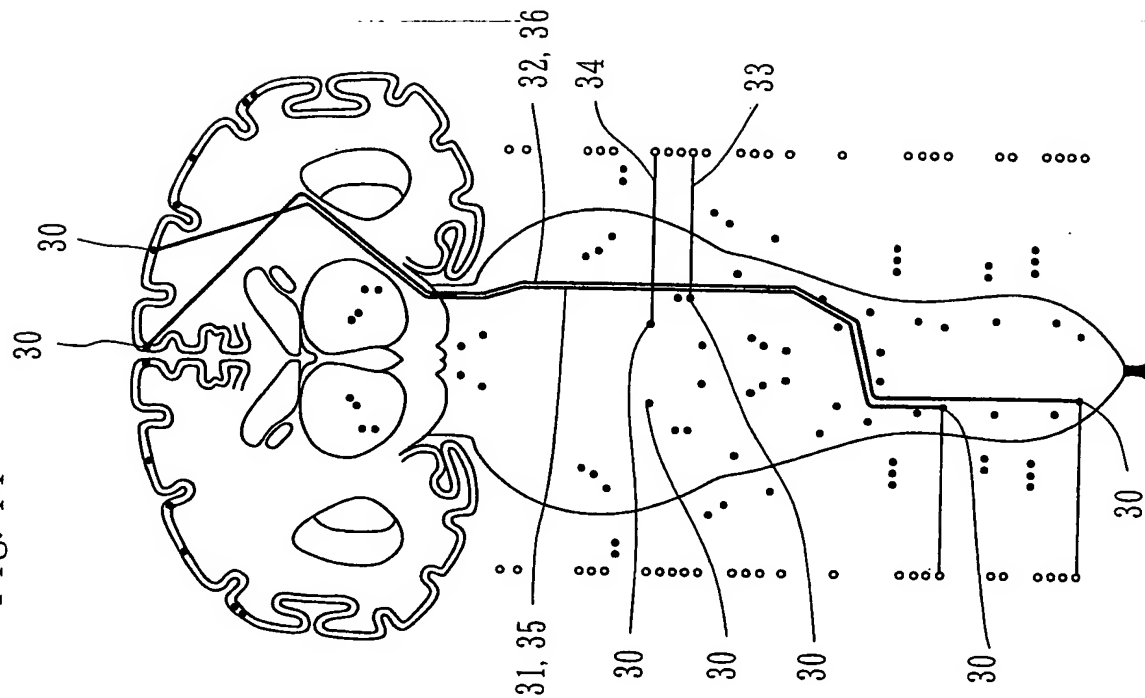


Fig. 15

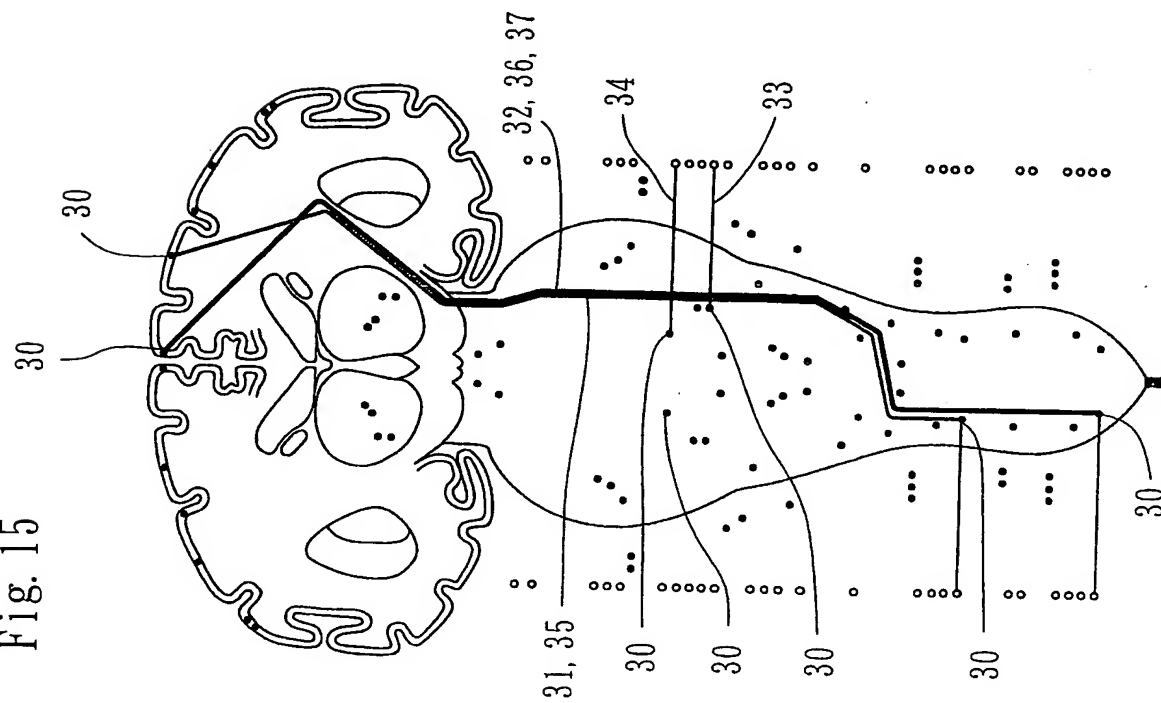


Fig. 16

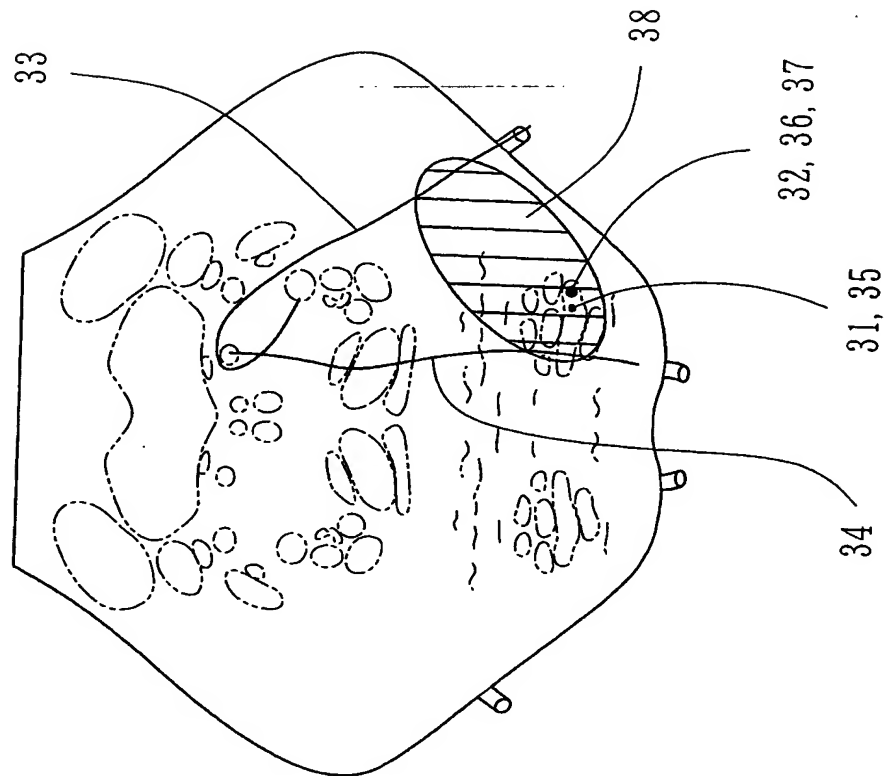


Fig. 17

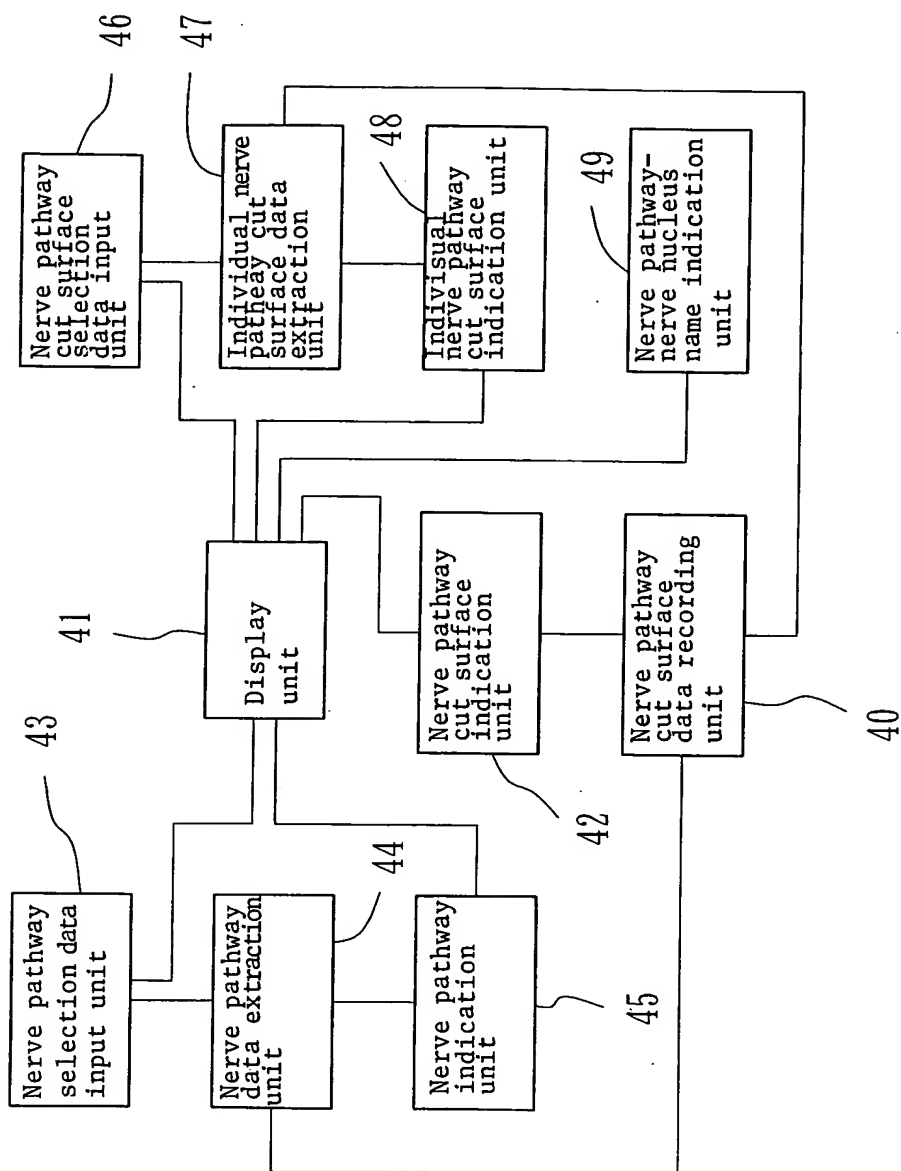


Fig. 18

## Nerve pathway

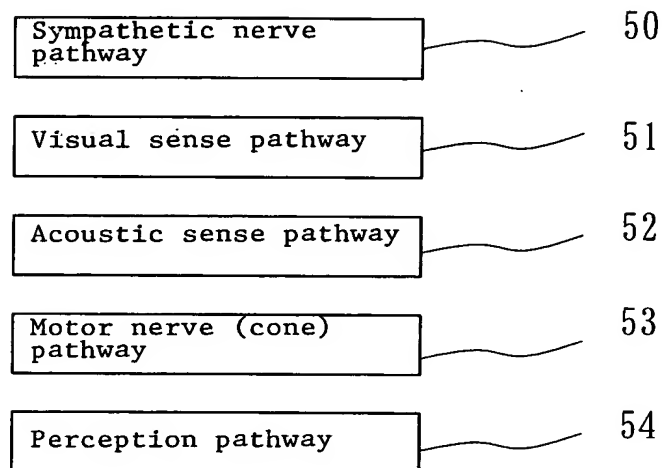
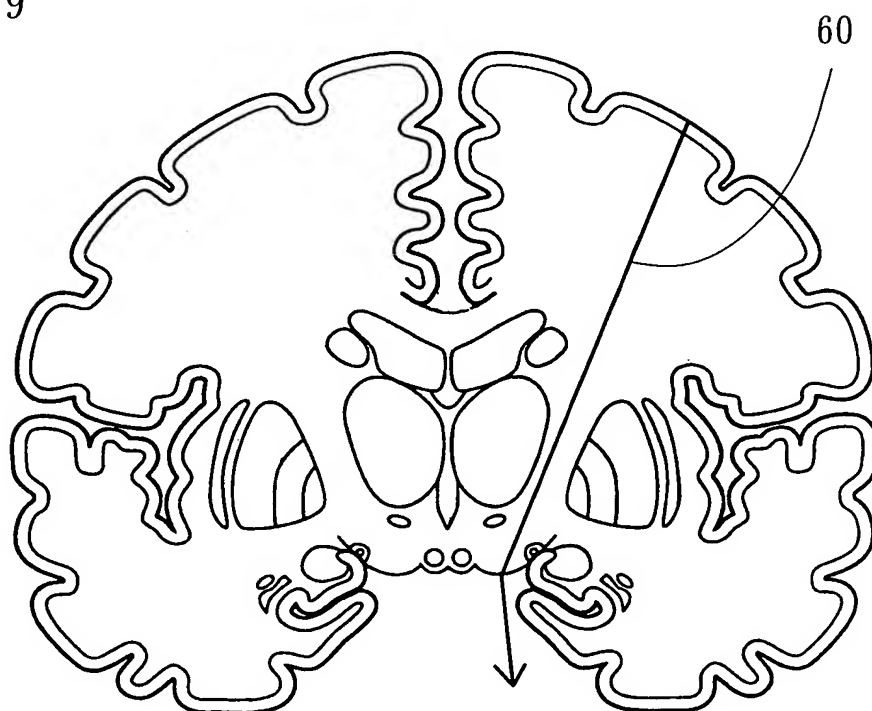


Fig. 19



To Fig. 20

Fig. 20

Fig. 21

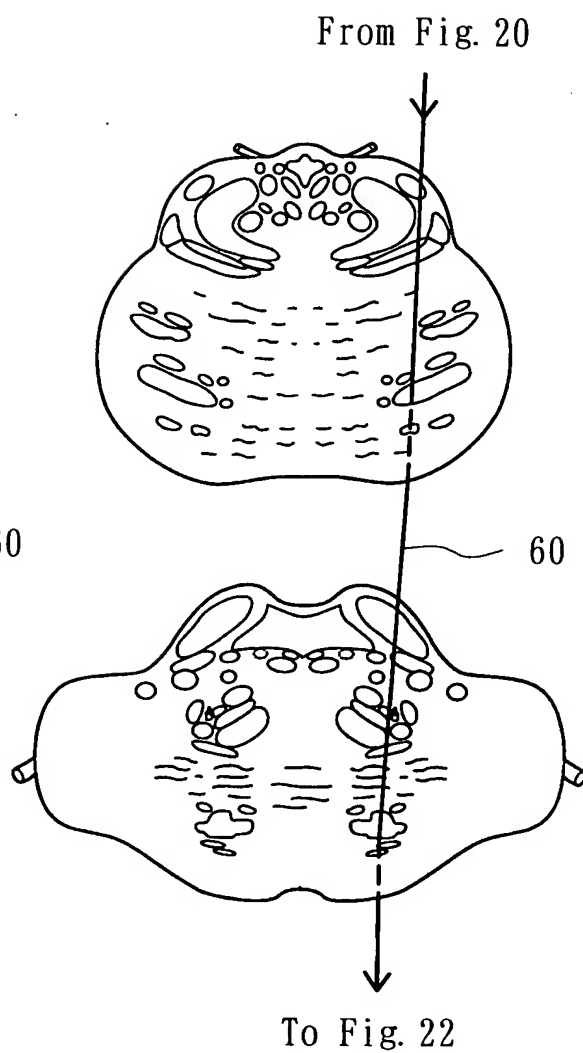
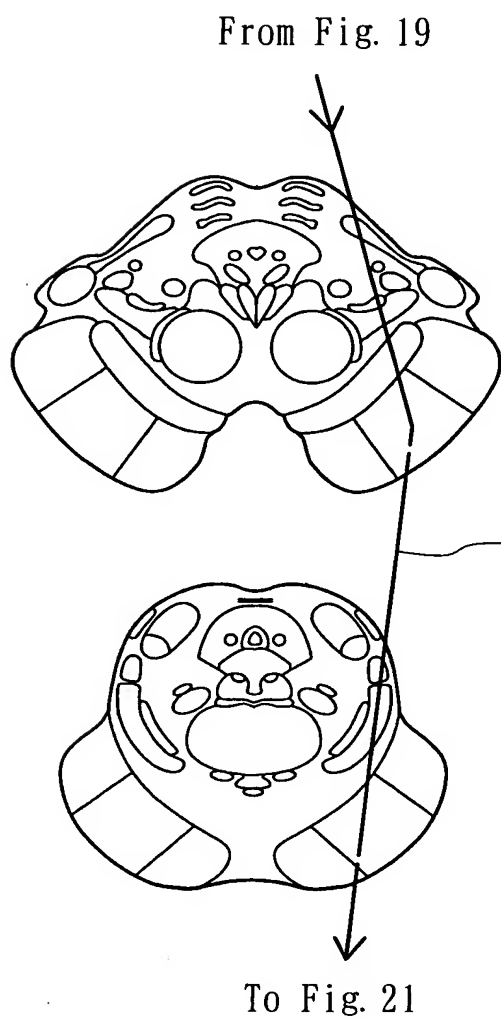
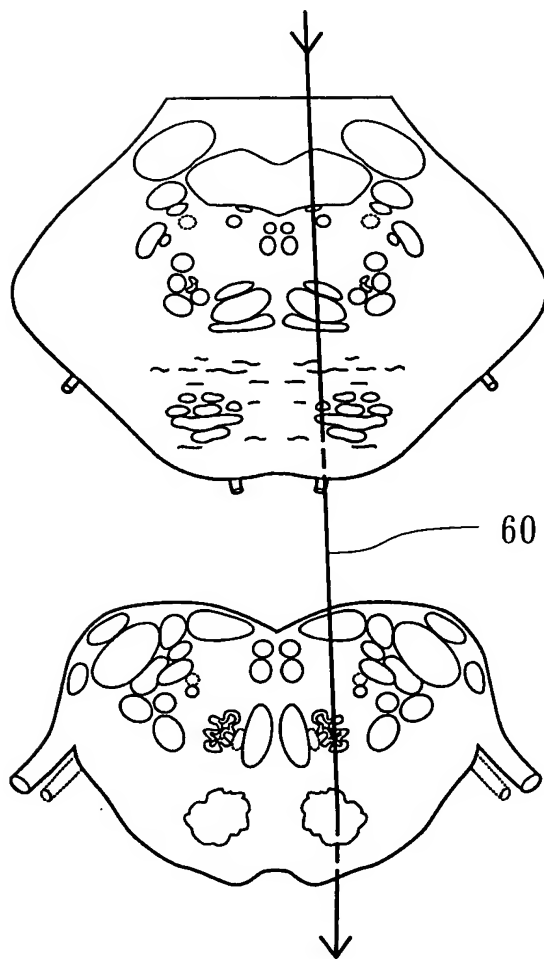


Fig. 22

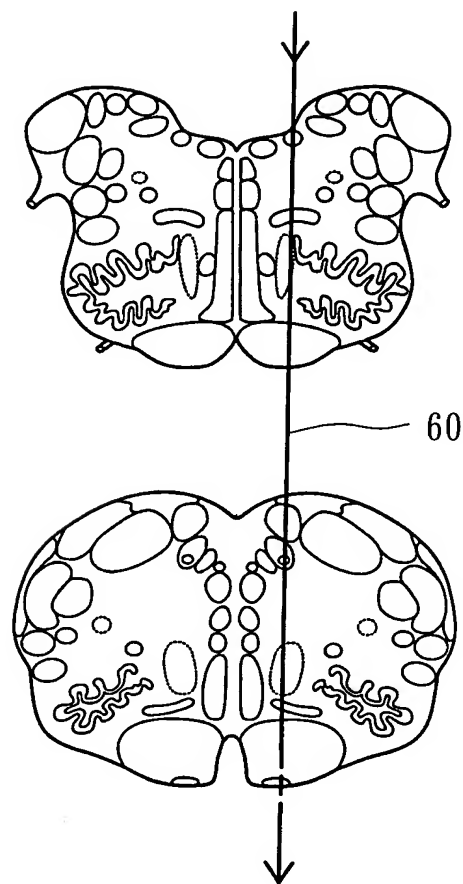
Fig. 23

From Fig. 21

From Fig. 22



To Fig. 23



To Fig. 24



Fig. 24

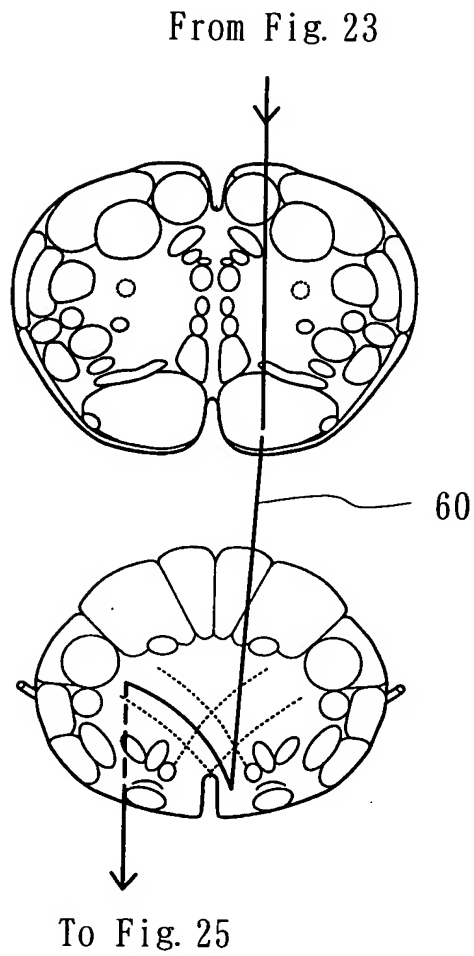


Fig. 25

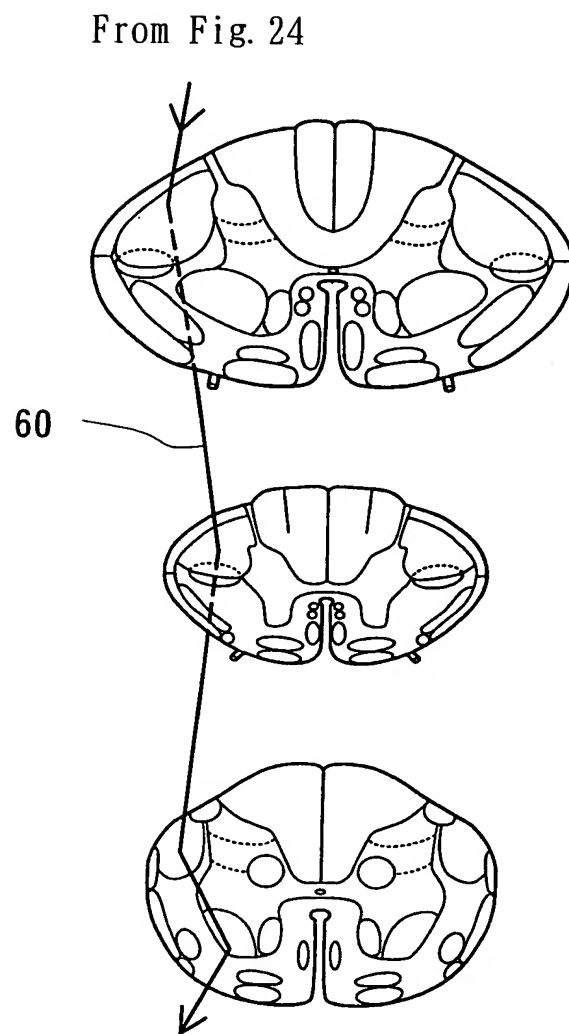


Fig. 26

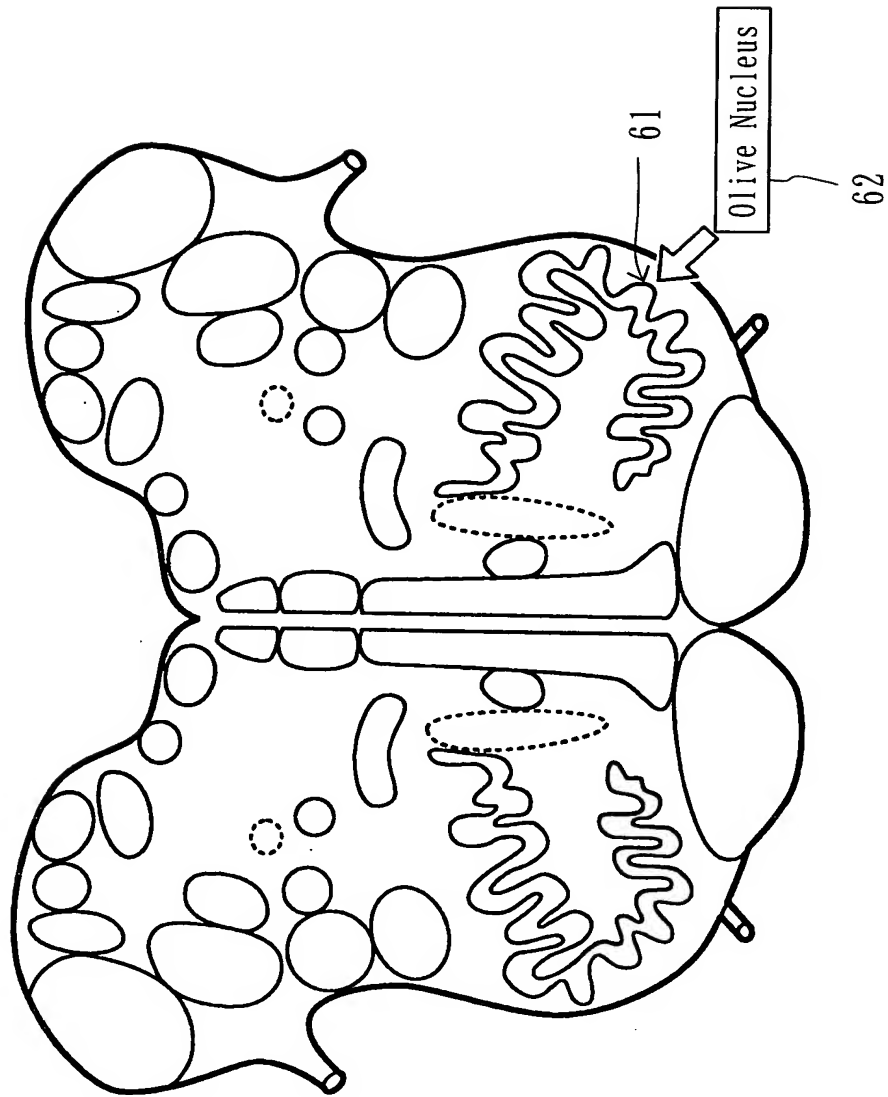


Fig. 27

| 71<br>Articulation | 72<br>Movement      | 73<br>Depression<br>of muscle<br>force | 70<br>74<br>Name of muscle                | 75<br>Electro-<br>myogram<br>aberrance |
|--------------------|---------------------|--|---|--|
| Shoulder joint     | Flexion             | No                                     | Deltoideus muscle                         | No                                     |
|                    |                     |  | Coracobrachialis<br>muscle                | No                                     |
|                    | Stretch             | No                                     | Teres major muscle                        | No                                     |
|                    |                     |  | Broadest muscle of back                   | No                                     |
|                    | Excycloduc-<br>tion | No                                     | Teres minor muscle                        | No                                     |
| Elbow joint        |                     |  | Triceps muscle of arm                     | No                                     |
|                    | Stretch             | No                                     | Musculi anconeus                          | No                                     |
|                    | Flexion             | Yes                                    | Biceps muscle of arm                      | No                                     |
|                    |                     |  | Brachial muscle                           | No                                     |
|                    |                     |  | Musculi brachioradialis                   | Yes                                    |
| Antebrachium       | Supination          | Yes                                    | Antebrachium musculi<br>spinator          | Yes                                    |
| Hand joint         | Flexion             | No                                     | Musculi flexor carpi<br>radialis          | No                                     |
|                    |                     |  | Musculi flexor carpi ulnaris              | No                                     |
|                    | Stretch             | Yes                                    | Musculi extensor carpi<br>radialis longus | Yes                                    |
|                    |                     |  | Musculi extensor carpi<br>radialis brevis | Yes                                    |
|                    |                     |  | Musculi extensor carpi<br>ulnaris         | Yes                                    |
| -                  | -                   | -                                      | -   | -                                      |
| -                  | -                   | -                                      | -   | -                                      |
| -                  | -                   | -                                      | -   | -                                      |

Fig. 28

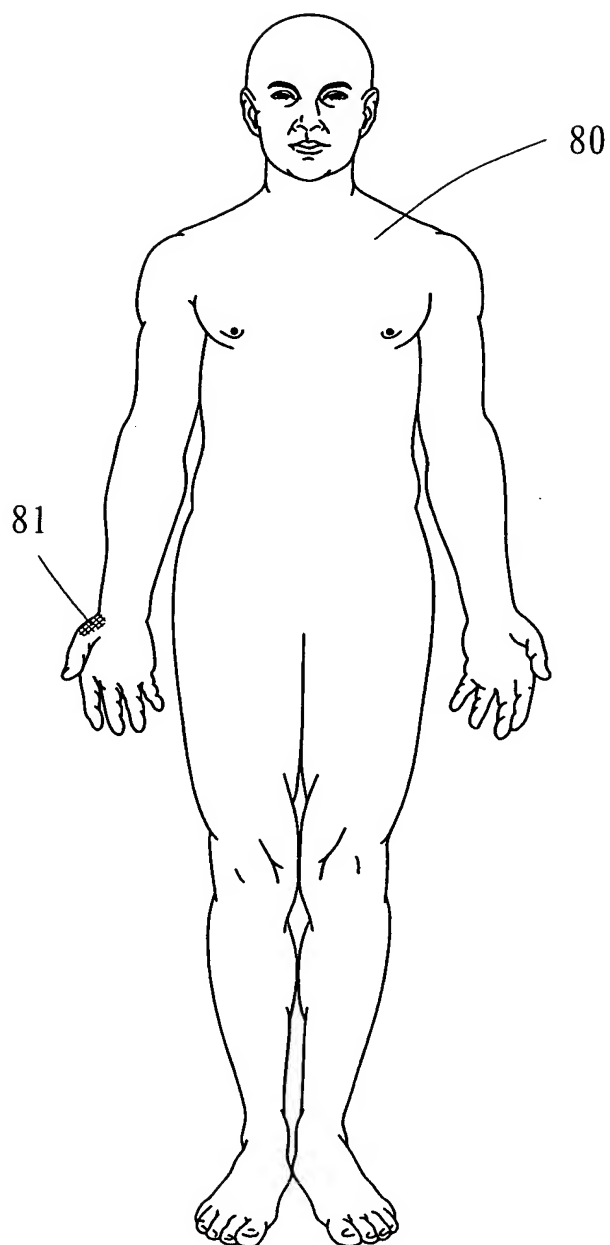


Fig. 29

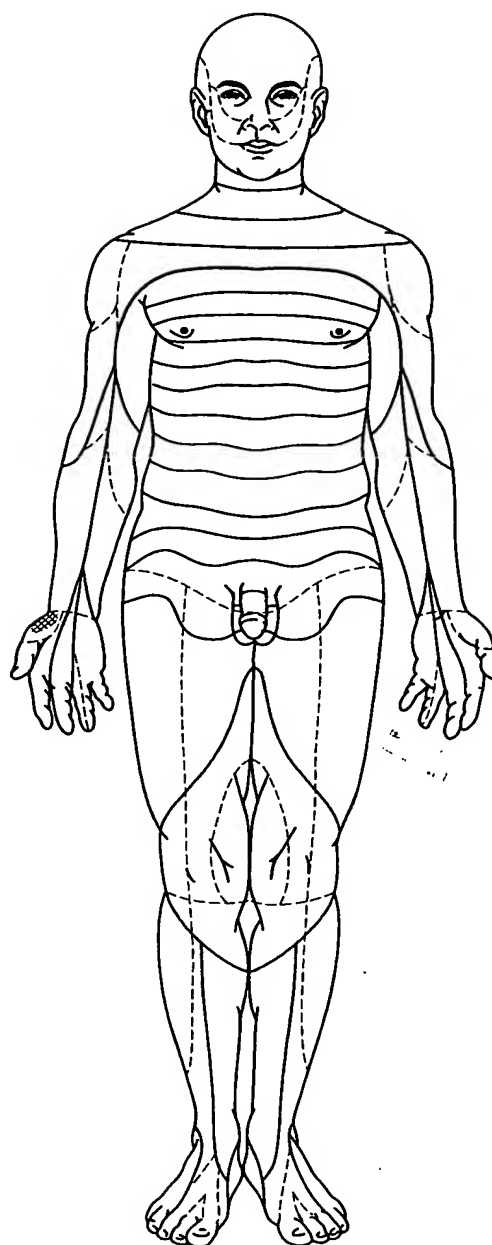


Fig. 30

